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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,076	09/28/2007	Christian Funke	2400.0390000/VLC/CMB	1328

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EXAMINER	
PIHONAK, SARAH	

ART UNIT	PAPER NUMBER
1627	

MAIL DATE	DELIVERY MODE
07/21/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/579,076	FUNKE ET AL.	
	Examiner	Art Unit	
	SARAH PIHONAK	1627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 May 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,6 and 8-11* is/are pending in the application.

4a) Of the above claim(s) *5 and 6* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 8-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/17/2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This application, filed on 9/28/2007, is a national stage entry of PCT/EP04/12330, filed on 10/30/2004.

Priority

This application claims foreign priority to the following applications: 10353280.3, filed on 11/14/2003, and 102004021564.2, filed on 5/3/2004. Certified English translations of the foreign priority documents have been received; therefore, acknowledgement is made for foreign priority for the date of 11/14/2003.

Response to Remarks

1. In the response filed on 5/5/2010 and 5/24/2010, Applicants added new claims 8-11, which have been included for examination in this office action. Claims 5-6 were previously withdrawn due to the restriction requirement.

2. Applicant's arguments filed 5/5/2010 have been fully considered but they are not persuasive. The Applicants have argued that the claims would not have been prima facie obvious to one of ordinary skill in the art, at the time of the invention, over Lahm et. al., WO 2003/015518, in view of Kodama et. al., US Patent No. 6,472,417, because Lahm et. al. discloses a variety of different insecticides, fungicides, nematocides, bactericides, and acaricides which can be combined with the elected species of formula (I-1), 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide. The Applicants have asserted that there would have been no motivation for one of ordinary skill in the art to select the claimed

pyrethroids out of the possible selection of fungicides and pesticides. The examiner respectfully disagrees. Lahm et. al. teaches a pesticide composition comprised of the elected compound of formula (I-1), 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, and teaches that other pesticidal agents, such as cyfluthrin, cypermethrin, deltamethrin, and other pyrethroids can be combined to form a composition. Therefore, it would have been obvious to one of ordinary skill in the art to readily combine 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide with pyrethroids. While Lahm et. al. does not explicitly teach that the ratio of 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide to pyrethroids is from 50:1 to 1:5, Kodama et. al. teaches that pyrethroids can be combined with other pesticides to provide a synergistic effect, within the weight ratio claimed. As such, one would have expected success in combining 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide with cypermethrin, deltamethrin, and other pyrethroids within the claimed weight ratio. The Applicants have argued that the pesticide agent taught by Kodama et. al. which is combined with the pyrethroids is structurally different from 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, and that one of ordinary skill in the art would not have been motivated to combine the claimed pyrethroids with 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide.

This argument has been fully considered, but it is not found persuasive. The pyrazole agent taught by Kodama et. al. and 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide are both pesticides; as the prior art teaches that pyrethroids can be combined with other pesticides for a possible synergistic effect, it would have been prima facie obvious to combine the claimed pyrethroids with another pesticide, such as 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide.

The Applicants have stated that the results provided by the specification and the declaration of Dr. Wolfram Andersch (dated 10/27/2009) show unexpected synergy between the claimed pyrethroids and compounds of formula (I-1). It is acknowledged that the specification and the declaration support synergy for the combinations of several compounds of formula (I-1) and betacyfluthrin, deltamethrin, and lambdamethrin, in the ratio range from 50:1 to 1:5. However, these results are not fully commensurate in scope with the claims. The claims are directed to a combination comprised of compound of formula (I-1) and acrinathin, betacyfluthrin, cypermethrin, deltamethrin, lambda-cyhalothrin, taufluvalinate, and gamma-cyhalothrin, in the weight ratio from 50:1 to 1:5. The specification and declaration do not provide support for synergy between all compounds of formula (I-1) and betacyfluthrin, deltamethrin, and lambdamethrin, as well as acrinathrin, cypermethrin, taufluvalinate, and gamma-cyhalothrin; as such, the claims do not present unexpected results over the prior art. The declaration and specification have only shown synergy between compounds (I-1-4),

(I-1-9), and cyahlothrin, betacyfluthrin, and deltamethrin, for weight ratios of 25:1, 1:1, and 1:5. The results are not fully supportive for synergy between all of the claimed compounds of formula (I-1) and all of the claimed pyrethroids. Lahm et. al. teaches that 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide can be combined with a variety of compounds, and Kodama et. al. teaches that other pyrethroids in addition to cypermethrin and deltamethrin can be combined with pesticides for synergistic combinations; therefore, it would have been prima facie obvious, in the absence of synergy for all of the claimed pyrethroids, to combine 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide with any one of the claimed pyrethroid compounds. The rejection was proper and is maintained, for reasons of record. For Applicants' convenience, this rejection will be reiterated below, with slight modification for new claims 8-11. Accordingly, this action is made FINAL. The claims were examined with regards to the previously elected species of formula (I-1), 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide (I-1-4).

3. Claims 1 and 8-11 were examined.

4. Claims 1 and 8-11 are rejected.

Claim Rejections-35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

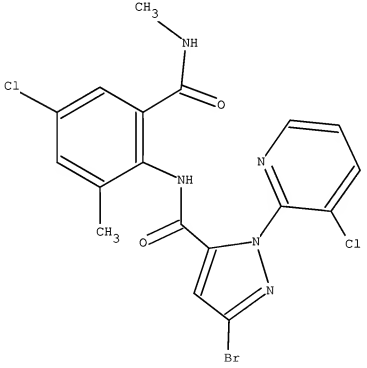
2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 1 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lahm et. al. WO 2003/015518 publication, in view of Kodama et. al., US Patent No. 6,472,417 (all of previous record).

Claim 1 and 8-11 are drawn to a composition comprised of a synergistically effective amount of an anthranilamide of formula (I-1), such as the elected compound, 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, and a pyrethroid selected from acrinathrin, betacyfluthrin, cypermethrin, deltamethrin, lambda-cyhalothrin, taufluvalinate, and gamma-cyhalothrin, in which the ratio of 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide to pyrethroid compound ranges from 50:1 to 1:5. The structure of the elected compound, 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, is shown below:



Lahm et. al. teaches a pesticide composition comprised of the claimed compounds of formula (I-1), and particularly discloses the claimed compound, 3-bromo-

N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide (p. 3, lines 24-27; p. 42, Example 11; p. 89, lines 2-4). Lahm et. al. also teaches the combination of 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide with additional active agents, such as the pyrethroids cyfluthrin (as well as beta- and lambda cyfluthrin), cypermethrin, and deltamethrin (p. 142, claim 9). Lahm et. al. also teaches that 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is a potent pesticide, yet provides significant protection to plants (p. 115, compound 531, p. 128, lines 7-8 and 25, p. 129, lines 10-11 and 27, p. 131, lines 20 and 22, p. 136, lines 1-8).

Lahm et. al. does not explicitly teach that 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is combined with pyrethroids such as beta-cyfluthrin, cypermethrin, and deltamethrin in a ratio from 50:1 to 1:5.

Kodama et. al. teaches that the combination of N-phenyl pyrazole compounds with pyrethroid compounds, such as cypermethrin, and deltamethrin result in a synergistic pesticidal effect (Abstract; column 1, lines 27-39 and lines 43-49; column 2, lines 38-39; column 3, lines 10-11). Particularly, Kodama et. al. teaches that the ratio of N-phenyl pyrazole compound to pyrethroid, for a synergistic effect, ranges from 10:1 to 1:10 (column 3, lines 15-18), which is within the weight ratio range claimed. Additionally, Kodama et. al. teaches that other pyrethroid compounds can be used to provide synergistic combinations (column 2, lines 18-26).

One of ordinary skill in the art, at the time of the invention, would have been motivated to combine the N-phenyl pyrazole compound, 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, with pyrethroid compounds such as cypermethrin and deltamethrin, because Lahm et. al. teaches that 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is a potent pesticide which can be readily combined with pyrethroid agents such as cypermethrin, and deltamethrin, and Kodama et. al. teaches that the combination of N-phenyl pyrazole compounds with pyrethroids including cypermethrin and deltamethrin results in a synergistic pesticide effect. As the N-phenyl pyrazole compounds taught by Kodama et. al., and the claimed compound, 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, both possess pesticidal activity, one of ordinary skill in the art would have expected success in substituting 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide for the N-phenyl pyrazole compounds in the composition taught by Kodama et. al. Kodama et. al. teaches that N-phenyl pyrazole compounds, when combined with pyrethroid compounds, provide a synergistic pesticide. Kodama et. al. teaches that the weight ratio of N-phenyl pyrazole to pyrethroid ranges from 10:1 to 1:10, which is within the weight ratio range claimed. Furthermore, the optimization of weight ratio ranges for enhanced pesticidal effect and stability would have been considered routine and obvious to one of ordinary skill in the art, and as such it would have been obvious to combine the N-phenyl pyrazole and pyrethroids in the ratio range

as claimed, from 50:1 to 1:5. As the pesticide 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is a N-phenyl pyrazole, it would have been prima facie obvious to one of ordinary skill in the art, at the time of the invention, to combine this agent with pyrethroids such as deltamethrin, cypermethrin, and others, for a synergistic pesticide effect, in the weight ratio range as claimed.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Information Disclosure Statement

6. The information disclosure statement (IDS) submitted on 6/17/2010 was filed after the mailing date of the non-final action on 1/5/2010. The submission is in

compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH PIHONAK whose telephone number is (571)270-7710. The examiner can normally be reached on Monday-Thursday 8:00 AM - 6:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571)272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.P.

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